



Showing the World How It's Done

Carefully Designed Limits on Compliance Offsets Can Spur Investment in Clean-Tech Innovation, Create Green Jobs, and Produce Clean Air

California Climate Choices

CONTEXT

California is poised to enter its third year of implementing Assembly Bill 32 (AB 32)—the country's first economy-wide cap on global warming emissions—which requires global warming emissions in California to be reduced to 1990 levels by 2020, about a 29-percent reduction from “business as usual.”

As part of the effort to meet that requirement, the California Air Resources Board (CARB) released its draft Scoping Plan—a document that is exceptional in many ways—on June 26, 2008. It includes a set of strong sectoral policies designed to achieve 80 percent of the emissions reductions called for under AB 32, it gives a cogent explanation of the ways in which cap-and-trade can work harmoniously with other policy instruments, and it calls for a California cap-and-trade program to be developed and linked with the WCI, which brings together seven western states and four Canadian provinces.¹

The WCI has established a regional emissions-reduction target of 15 percent below 2005 levels by 2020, a strong economy-wide target. The first phase of WCI development will culminate in September 2008 with the outlines of a cap-and-trade program and a process to fill in remaining details.

OFFSETS RECOMMENDATION FROM CALIFORNIA'S DRAFT SCOPING PLAN

The draft Scoping Plan suggests limiting offsets to 10 percent of a firm's “compliance obligation” (defined as the total emissions a firm generates under the cap). Because the capped sectors (transportation, electricity, natural gas, and industry) will collectively be allowed to emit 365 MMT of CO₂e (million met-



California Wind Energy Association

ric tons of carbon dioxide equivalent) in 2020, this suggested 10 percent limit implies that up to 40 MMT of reductions could be achieved through offsets, if each firm uses its allotted 10 percent.

Yet the cap-and-trade program is only tasked with achieving about 35 MMT of reductions in the overall plan. Therefore, potentially all of the reductions that cap-and-trade seeks to achieve could be obtained through offsets. This means that firms in the capped sectors may be able to escape any emission reduction obligation from a cap and trade program. This undermines CARB's stated goal of ensuring that a significant portion of reductions come from within the capped sectors.

The draft Scoping Plan suggests a role for compliance offsets that is too large. Offsets should be limited to a small fraction of the reductions in a cap-and-trade program so that that emissions reduction will actually occur,

and to a significant degree, within the capped sectors themselves. Such a policy will encourage investment in clean technology, creation of green jobs, and attainment of clean air in California.

The draft Scoping Plan also implies that offsets may be used as an alternative for complying with direct regulations. CARB should prohibit the use of offsets as a means of compliance with any direct regulation.

DESIGNING EFFECTIVE LIMITS ON COMPLIANCE OFFSETS

California and the WCI states and provinces must carefully design their compliance offsets policies so as to place significant limits, both quantitative and geographic, on these offsets. Such policies should ensure:

- **The prioritization of clean air and public health benefits** from investments in global warming solutions

- **The realization of benefits** from clean-tech investments and innovation in key (capped) sectors
- **Meaningful reductions** in high-emitting capped sectors and avoidance of costly lock-in of long-lived fossil-fuel technology
- **The preservation of the option of linkage** to other cap-and-trade programs that have chosen to limit offsets.

Prioritize clean air and public health benefits for residents of California and the West. While reducing global warming pollution offers valuable climatic benefits in its own right, it will also provide many other important environmental benefits. When electricity providers, oil and gas companies, and other industrial sources reduce the amounts of global warming pollution that they produce, Californians will be exposed to lower levels of conventional smog-forming and toxic air pollutants as well. This improved air quality will in turn lead to better public health, lower health care costs, and higher levels of worker productivity and student performance. On the other hand, if offsets are allowed from anywhere in the world, which would be equivalent to the outsourcing of emissions reduction projects, then the valuable health benefits will be lost.

At present, Californians are quite literally dying from dirty air. The state has three of the five most polluted air basins in the country and the Los Angeles air basin has the worst year-round small-particulate pollution and the worst ozone levels in the country. CARB estimates that the policies cited in its draft Scoping Plan would reduce nitrous oxides emissions by 50 tons per day and the most dangerous kind of particulate matter (the smallest particles) by 10 tons per day. These reductions, according to CARB estimates, would result in 340 premature deaths avoided and a range of other public health benefits, with a combined economic value of \$1.5–\$2.4 billion in 2020. The Natural Resources

Defense Council, which recently released its own assessment, concludes that the improvement in air quality and reduction in health care costs would be even larger, preventing more than 700 premature deaths and saving \$3.2–\$5 billion in 2020.

Spur clean-tech investment, green-job development, and innovation. A 2004 survey of venture capitalists found that one of the main reasons why they are motivated to invest in California's clean-technology industry is the state's strong climate policies. As a result, that sector is surging. In 2007, California garnered 45 percent of North America's venture capital investment in clean-energy technologies, or \$1.8 billion, up from \$1 billion in 2006. California last year attracted more venture capital in clean tech than did all of Europe combined. Carefully designed offset limits will help maintain this momentum, thereby preserving the rates of investment and innovation in California's clean-tech industries that will be the foundation of the future's low-carbon economy.

By contrast, overly permissive offset policies would shift emissions reductions from capped sectors to other sectors or to other geographic areas. Investor expectations on the future profitability of

technological advances in the capped sectors would be reduced, thereby depressing investment. Moreover, the learning-by-doing and economies of scale that come with increased utilization would be lost. California's competitive advantage in the rapidly growing clean-tech global market should not be squandered; it makes much more sense to prioritize investment and innovation in clean tech—within the state, as opposed to essentially outsourcing—to take advantage of present opportunities. Other ancillary benefits that result from investing in a clean energy future is reduced reliance on imported fossil fuels, greater insulating from volatile oil and gas markets, and improved energy security.

Ensure meaningful reductions and avoid lock-in to higher-emitting capital. The broad reach of the cap-and-trade program proposed in the draft Scoping Plan means that almost all fossil-fuel combustion (in transportation, electricity generation, and other industrial activities) will be capped. Carefully designed offset limits promote technological changes in capped sectors by forcing emissions reductions within those sectors instead of diverting the reductions to other sectors of the economy or to other geographic areas. The draft



plan recognizes this important objective, stating that “[C]ARB is considering limiting the use of offsets... to help ensure a significant portion of required reductions come from within the state and within the regulated sectors.”²

However, the suggested quantitative limit does not square with this objective, as it implies that all of the reductions produced by capped sectors could come through offsets. The draft plan’s suggested allowable quantity of offsets (about 40 MMT) is actually greater than the reductions that the program is designed to achieve (about 35 MMT). With such an offset policy, opportunities for promoting investment in clean technology could be lost, resulting in costly lock-in to high-emitting capital that would make the eventual task of curtailing emissions far more expensive in the short timeframe we have left to avoid dangerous climate change.

Preserve the option of linkage

to other cap-and-trade programs that have chosen to limit offsets quantitatively. But linkage is unlikely in the absence of harmonization with those programs’ offset policies. The European Union Emission Trading Scheme in particular has signaled its intention to sharply curtail offsets in order to ensure that cap-and-trade provides the necessary impetus for a transition to a clean-energy future.

OFFSETS NOT NECESSARY FOR COST CONTAINMENT IN AB 32 IMPLEMENTATION

Most economic-modeling results suggest that the direct costs of AB 32 will be modest, close to zero, or possibly even positive. Moreover, these models

of cost do not account for the many ancillary economic and environmental benefits of reducing global warming emissions. CARB’s draft Scoping Plan expresses a similar view: “[T]he projected effect of the recommendation on the state economy...is likely to be overall positive.” Under these circumstances, compliance offsets would not be needed in California as a cost-containment approach.

OFFSETS: ONE OF MANY WAYS TO REDUCE GLOBAL WARMING POLLUTION

Compliance offsets offer just one way to achieve reductions outside the direct reach of a cap-and-trade program. Other means for producing reductions in non-capped sectors include incentive programs as well as other policy instruments covering a broad spectrum from mandates to informational campaigns about best practices. Offsets have the advantage of being funded by polluters regulated under cap-and-trade, but they also create an incentive for the sectors providing offsets to resist future mandatory measures (such as direct inclusion in cap-and-trade program), as this could mean loss of the offset-project revenue stream. And offsets offer particular challenges in the area of benefit estimation because the product of an offset project is intangible and can only be estimated indirectly.

CONCLUSION

While carefully designed limits on compliance offsets are an important aspect of cap-and-trade systems, the recommendation in CARB’s draft Scoping Plan allows for too large a role for compliance offsets. The suggested limit fails to guarantee that cap-and-trade will produce *any* reductions in the capped sectors that should be the primary targets. Less permissive limits, however, would promote the capture of ancillary benefits for the residents of California and WCI jurisdictions, would avoid lock-in to long-lived fossil fuel combustion technologies, and would ensure that meaningful reductions in the short and mid-term would put us on the path to our long-term goal of much deeper reductions.

California has the chance to demonstrate that the transition to a clean-energy future—especially one that offers a wide range of environmental and economic benefits—is possible. Given the state’s visionary climate policies and its comparative advantage in innovation, California is uniquely positioned to attract clean-tech investment funding. In fact, the world is increasingly looking to California for solutions to the global warming challenge. CARB should help seize this opportunity by reconsidering its suggested offset policy, which is overly permissive and downright counter-productive.

ENDNOTES

- 1 Under a cap-and-trade system, regulated entities are required either to reduce their emissions or to procure allowances (also called tradable permits) for any emissions they cannot reduce. In addition, they may have the option of satisfying a portion of their compliance obligation by holding “compliance offsets,” which essentially are credits for emissions reductions made outside of the capped sectors.
- 2 California Air Resources Board (CARB). 2008. Climate change draft scoping plan: A framework for change. Discussion draft pursuant to AB 32. June. Prepared for the State of California.

The full text of this report is in press and will soon be available on the UCS website at www.climatechoices.org.



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